

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method managing a management activity of at least one managed object by at least one manager object through a communication network, the method comprising the following steps:

- providing a plurality of intermediate objects configured to manage said at least one managed object according to a data set, said management activity being transformed into a set of results,
- receiving, at said plurality of intermediate objects, said data set from said at least one manager object,
- concurrently managing said at least one managed object through said plurality of intermediate objects, to generate said set of results, and
- transferring said set of results from said plurality of intermediate objects to said at least one manager object.

2. (Previously Presented) The method according to claim 1 which comprises the step of establishing communication between said at least one manager object and at least one of said plurality of intermediate objects via UDP protocol.

3-4. (Canceled)

5. (Previously Presented) The method according to claim 1 which comprises the following steps:

- managing at least one further managed object directly through said at least one manager object and transferring said data set and said results set between said at least one manager object and said at least one further managed object.

6. (Canceled)

7. (Previously Presented) The method according to claim 1 wherein at least one of said plurality of intermediate objects is provided with respective reception modules and transmission modules configured so that said at least one manager object sees said at least one of said plurality of intermediate objects as a managed object.

8. (Previously Presented) The method according to claim 1 wherein at least one of said plurality of intermediate objects comprises at least one respective management module configured so that said at least one managed object, which is managed by said at least one of said plurality of intermediate objects, sees said at least one of said plurality of intermediate objects as said at least one manager object.

9. (Previously Presented) The method according to claim 1 wherein at least one of said plurality of intermediate objects is provided with one of the following queues:

- an input queue for collecting input messages with respect to said at least one of said plurality of intermediate objects,
- an output queue for collecting output messages from said at least one of said plurality of intermediate objects, and
- a working queue for collecting messages inherent to said management activity performed by said at least one of said plurality of intermediate objects on said at least one managed object.

10. (Previously Presented) The method according to claim 9 which comprises the step of providing, in said at least one of said plurality of intermediate objects, a dedicated module for analyzing the input messages received by said input queue.

11. (Previously Presented) The method according to claim 10 which comprises the following steps:

- providing, in said at least one of said plurality of intermediate objects, an activity coordinating module for implementing at least one of the following functions:

- instantiating at least one concurrent process,
- updating activity status of the requests in said working queue, and
- creating statistic check messages to be sent to said at least one manager object through said output queue.

12. (Canceled)

13. (Previously Presented) The method according to claim 9 which comprises the step of establishing communication between said at least one manager object and said at least one of said plurality of intermediate objects by subjecting at least one part of the respective messages to a compression operation.

14. (Previously Presented) The method according to claim 13 wherein said compression operation is based on an acknowledgment of a sequence which appears periodically in the at least one part of the respective messages.

15. (Previously Presented) The method according to claim 14 wherein said compression operation implements a gzip type method.

16. (Previously Presented) The method according to claim 2 which comprises the step of indicating that compression of the message transferred by UDP is done.

17. (Previously Presented) The method according to claim 16 wherein a bit field in the UDP header is used to indicate that the compression operation is done.

18. (Previously Presented) The method according to claim 17 wherein bits comprised in the range from bit 62 to bit 69 in the UDP header are used in indicate that the compression operation is done.

19. (Previously Presented) The method according to claim 18 which comprises the step of setting at least one of the bits from 62 to 69 of the UDP message header to 1.

20. (Previously Presented) The method according to claim 13 wherein the communication between said at least one manager object and said at least one of said plurality of intermediate objects is implemented by means of SNMP messages, and comprises the following steps during the compression step:

- reading the entire SNMP message,
- encoding the read message in hexadecimal format, and
- subjecting the message encoded in hexadecimal format to compression.

21. (Previously Presented) The method according to claim 13 wherein communication between said at least one manager object and said at least one of said plurality of intermediate objects is implemented by means of SNMP messages, comprises the following steps during the reception step:

- subjecting the received message to decompression complementary to said compression operation, to obtain a message subjected to decoding in hexadecimal format,
- decoding the message from the hexadecimal format, and
- reconstructing the entire SNMP message from said decoded message.

22. (Previously Presented) The method according to claim 21 which comprises a nesting operation in a standard SNMP message for transmission of the message subjected to said compression operation.

23. (Previously Presented) The method according to claim 22 which comprises the following steps during transmission:

- reading the message subjected to said compression operation in bytes and transposing it into a corresponding ASCII character message,

- generating a variable binding set comprising a first OID indicating an original file size and subsequent OID/value pairs which carry portions of said message subjected to said compression operation transposed into ASCII characters,

- reconstructing SNMP message header data,

- encoding the resulting SNMP message in hexadecimal format to generate a UDP payload, and transferring the generated UDP payload.

24. (Previously Presented) The method according to claim 23 which comprises the following steps during reception:

- receiving the message subjected to said compression operation as a UDP payload,

- subjecting the received UDP payload to a hexadecimal decoding operation,

- acknowledging and assembling the variable binding of the message subjected to hexadecimal decoding,

- subjecting the message subjected to said acknowledging and assembling operation to binary ASCII decoding, and

- subjecting the decoded message in binary form to said decompression operation.

25. (Previously Presented) The method according to claim 21 which comprises the step of integrating the message subjected to said compression operation through UDP nesting for the transmission of the message subjected to said compression operation.

26. (Currently Amended) The method according to claim 25 which comprises the following steps during transmission:

- configuring said message subjected to said compression operation as a Protocol Data Unit (PDU) payload, and

- transferring the PDU payload to a ~~receiver~~transmission port.

27. (Previously Presented) The method according to claim 26 which comprises the following steps during reception:

- receiving said message as a payload of a PDU UDP received at a reception port, and
- extracting said payload from said PDU.

28. (Currently Amended) The method according to claim 27 comprising the step of:

transmitting a synchronisation message of the SNMP type indicating at least one of ~~a~~ said transmission port and said reception port between said at least one manager object and said at least one of said plurality of intermediate objects.

29. (Currently Amended) A system for managing communication networks comprising:

a plurality of computers each comprising a processor,

wherein the processor associated with a first of the plurality of computers is configured to execute at least one manager object;

wherein the processor associated with a second of the plurality of computers is configured to execute at least one managed object; and

wherein the processor associated with a third of the plurality of computers is configured to execute ~~a plurality of intermediate objects~~ at least one intermediate object that causes the third computer to ~~be configured to~~:

– receive a data set from said first computer when said processor associated with said first computer executes said at least one manager object,

– concurrently manage said ~~at least one managed object~~ second computer according to said data set when said processor associated with said second computer executes said at least one managed object,

– generate a set of results by said managing of said second computer when said processor associated with said second computer executes said at least one managed object, and

– transfer said set of results to said ~~at least one manager object~~ first computer.

30. (Currently Amended) A ~~computer-readable medium~~ physical memory storing instructions that, when executed by a processor, performs:

- managing at a plurality of intermediate objects at least one managed object according to a data set, said managing being transformed into a set of results,
- receiving, at said plurality of intermediate objects, said data set from said at least one manager object,
- concurrently managing said at least one managed object through said plurality of intermediate objects, to generate said set of results, and
- transferring said set of results from said plurality of intermediate objects to said at least one manager object.

31. (Previously Presented) The method according to claim 14, wherein a compressed message is generated responsive to the acknowledgment of a sequence which appears periodically in the at least one part of the respective messages prior to compression.